



Modified PTO/SB/33 (10-05)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number

Q80519

Mail Stop AF
Commissioner for Patents
P.O. Box 1450 Alexandria, VA 22313-1450

Application Number

10/807,345

Filed

March 24, 2004

First Named Inventor

Hidenori TOYOSE

Art Unit

3722

Examiner

Sara Addisu

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal

The review is requested for the reasons(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

☒ I am an attorney or agent of record.

Registration number 33,276

Signature

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Typed or printed name

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June 15, 2006

Date



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q80519

Hidenori TOYOSE

Appln. No.: 10/807,345

Group Art Unit: 3722

Confirmation No.: 3494

Examiner: Sara Addisu

Filed: March 24, 2004

For: CUTTER BODY, ROTARY TOOL, AND METHOD FOR ASSEMBLING THE
ROTARY TOOL

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF - PATENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the new Pre-Appeal Brief Conference Pilot Program, and further to the Examiner's Final Office Action dated December 15, 2005, Appellant files this Pre-Appeal Brief Request for Review. This Request is also accompanied by the filing of a Notice of Appeal, and a Petition and payment for an Extension of Time.

Preliminarily, Appellant respectfully requests the Examiner to return initialed Form PTO/SB/08 A & B (modified) for the Information Disclosure Statement filed March 21, 2005. Form PTO/SB/08 A & B (modified) has been entered into the USPTO PAIR system.

Also, Appellant requests the Examiner to enter the Amendment under 37 C.F.R. § 1.116 filed May 12, 2006 which presents a modified Abstract in response to the objection to the Abstract as being in claim format.

Appellant turns now to the rejection at issue.

Claims 1-4 and 6-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,667,343 to Hessman et al. in view of U.S. Patent No. 6,634,842 to Ueno and further in view of U.S. Patent No. 4,318,874 to Lemelson.

Hessman et al. was cited as teaching a milling cutter including a cassette (cartridge) for removably supporting a diamond coated cutting insert, and including a tap 8 for adjusting the position of the cartridge. The Examiner relied on Ueno as teaching a hexagonal recessed portion of the screw, which is a wrench-receiving socket sealed by a resin-made embedding material (citing col. 9, lines 1-10). Relative to claim 4, Figs. 7 and 8 were cited as teaching a screw having a wrench reception socket that is narrowed toward an opening. With respect to claim 3 (wrench reception socket roughened on at least an inner wall surface thereof), the Examiner has taken Official Notice that it is known to use various frictional engagement means to keep the resin inside the wrench reception socket, further citing Figs. 14(a) and (b). As to claim 6, the Examiner considered that it is well known to select from fasteners having a variety of wrench reception sockets.

The grounds for rejection remain substantially the same as set forth in the Office Action dated March 23, 2005 (i.e., that it would have been obvious to seal the wrench reception socket of Hessman et al.'s fastener by the resin-made embedding material taught by Ueno so as to make the screw tamper proof), except that the Examiner now relies on Lemelson as teaching that a resin can be heated to melt the same so as to unseal a wrench reception socket that has been sealed with a resin.

Claim 1 on appeal is directed to a cutter body comprising a cartridge for allowing a cutting insert to be removably fixed thereto, a cutter body member, a second screw for fixing the cartridge to the cutter body member, and an adjustment screw for adjusting the position of the cartridge. One or both of a wrench reception socket of the fastened second screw and a wrench reception socket of the adjustment-completed adjustment screw is sealed. Furthermore, the sealed wrench reception socket of the second and/or adjustment screw can be unsealed for readjustment and resealed as needed.

Turning to the cited prior art, Ueno surely discloses a sealed adjustment screw, and the Examiner would modify the cutter of Hessman et al. to include a sealed adjustment screw or sealed second screw of Ueno as required by the present claims. However, the Office Action does not identify sufficient suggestion or motivation, either in the references themselves or in

knowledge generally available to one of ordinary skill, to modify Hessman et al. or to combine the reference teachings. The fact that Ueno teaches a sealed adjustment screw, of itself, provides no suggestion or motivation to modify the cutter body of Hessman et al. to incorporate the same.

In fact, Ueno teaches at column 2, lines 34-38 that:

...the inventors of the invention have proceeded to develop a new screw which cannot be easily removed after it is once tightened.

To clearly distinguish the invention from the cited prior art, the claims were amended in the Amendment filed August 18, 2005 to recite that "the sealed wrench reception socket of said second and/or adjustment screw can be unsealed for readjustment and resealed as needed".

Not only does the prior art fail to disclose the particular problem solved by the present invention (which prevents accidental adjustment, while also allowing for readjustment when necessary by unsealing the wrench reception socket - see paragraph [19]), neither the prior art nor knowledge generally available to one of ordinary skill provides any teaching, suggestion or motivation to incorporate a crime prevention screw of Ueno in a face milling cutter of Hessman et al.

At page 6 of the Office Action of December 15, 2005, the Examiner asserted that:

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to sealed the wrench reception socket of Hessman et al.'s fastener by resin-made embedding material as taught by Ueno for the purpose of preventing drawing-out of the screw ('842, Col. 1, lines 10-15) (i.e. to make tamper proof).

Ueno surely describes use of its crime prevention screw for fastening a license plate to the body of an automobile or to fix a car stereo or car navigation device in the interior of an automobile (column 1, lines 42-50). The use of the crime prevention screw for preventing drawing-out of the screw makes sense in these applications. However, this reasoning does not apply to the wrench reception socket of Hessman et al. which includes an adjustment screw so as to allow the cutter to be adjusted.

A novel and patentably distinguishing feature of the invention is that the sealed wrench reception socket or adjustment screw can be unsealed for readjustment and resealed as needed. Although such feature is clearly recited in claim 1, the Examiner erroneously did not consider this to be a structural limitation of the claims (see Advisory Action of June 8, 2006). Claim 1 does not encompass each and every sealed wrench reception sockets, only those that can be unsealed for readjustment and resealed as needed.

On the other hand, Lemelson teaches injection molding of molten thermoplastic resins to produce a molded article. This kind of high-temperature melting suggested by the Examiner does not provide an adjustment screw that can be unsealed for readjustment and resealed as needed as required by present claim 1.

Paragraph [19] of the present specification exemplifies silicone rubber (not a molding resin) as one such resin for use in the invention where adjustment and sealing can be repeated any number of times. Contrary to the Examiner's suggestion in the Advisory Action, there is no need to recite that the wrench reception socket is sealed with a resin comprising silicone rubber. The characteristic feature of the invention, namely, that the sealed wrench reception socket or adjustment screw can be unsealed for readjustment and resealed as needed, is already a material limitation of the claims.

Regarding claim 6, the Examiner cited various references that teach various fasteners having a variety of wrench reception sockets. However, claim 6 requires more than just selection from a variety of wrench reception sockets. Claim 6 requires that one or both of the wrench reception sockets has a shape that does not fit a wrench for use with the other, and it is this aspect of the invention that is not taught by "Official Notice" or any of the prior art cited by the Examiner.

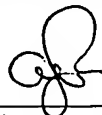
As to claim 3, the Examiner cited Ueno's Figs. 14(a) and 14(b) as teaching a recessed portion 37c having a projection that causes the inner surface of the wrench reception socket/research to be uneven/not smooth, namely, roughened. Perhaps claim 3 could be read so broadly as to encompass the type of projections shown in Figs. 14(a) and 14(b) of Ueno. However, such engagement portions do not satisfy the limitation of claim 1 which requires a

sealed wrench reception socket that can be unsealed for readjustment and resealed as needed. As taught by Ueno in reference to Figs. 14(a) and 14(b), the embedding material 17 is embedded in the recess portion 37c of the screw head 37b so that the embedding material 17 cannot be drawn out (column 16, lines 6-10).

Appellant respectfully requests the Pre-Appeal Brief Conference Panel to withdraw the foregoing rejection in view of clear error as detailed above. None of the cited prior art including Lemelson provides an adjustment screw that can be unsealed for readjustment and sealed as needed as required by present claim 1. That is, because the asserted combination does not teach or suggest all claim limitations, and because the prior art provides no suggestion or motivation to modify the milling cutter of Hessman et al. to incorporate therein the resin embedded sealed adjustment screw of Ueno (which is not easily removed after it is once tightened), it is respectfully submitted that the rejection does not establish a *prima facie* case of obviousness.

Accordingly, it is respectfully submitted that the claims on appeal are patentable over Hessman et al. in view of Ueno, further in view of Lemelson and Appellant respectfully requests withdrawal of the foregoing rejection.

Respectfully submitted,



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